

REMARKS/ARGUMENTS

Reconsideration of the above-identified application in view of the present amendment is respectfully requested. By this amendment, claims 3, 5, 9, and 11 are amended, and claims 15 and 16 are added. Claims 3 and 5-16 are currently pending. Claim 8 is allowed. A copy of the amendment filed on April 11, 2006 is enclosed with this amendment to overcome the objection set forth in item 2 of the office action. The specification is amended to correct the informality listed at item 4 of the office action. Claims 9 and 11 are amended to provide sufficient antecedent basis for the term "said portion" in order to overcome the objection of these claims listed at item 5 of the office action.

Independent claims 3 and 5 stand rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,312,012 to Bohn et al. ("Bohn") alone and over Bohn in view of U.S. Patent No. 6,644,145 to Albayrak et al ("Albayrak"). These rejections are respectfully traversed. The M.P.E.P. sets forth the criteria for a rejection for obviousness under 35 U.S.C. §103 as follows:

To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure.

See, M.P.E.P. § 706.02(j) *citing In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

1. Bohn and Albayrak do not teach or suggest all of the limitations recited in claims 3 and 5.

Neither Bohn nor Albayrak, alone or in combination, teach or suggests all of the limitations recited in claim 3 and 5. In particular, neither Bohn nor Albayrak taken either alone or in combination discloses or suggests a first detent element in the form of a detent pin mounted on the steering wheel skeleton and a second detent element on a gas bag module for receiving the detent pin to connect the gas bag module to the steering wheel skeleton. As shown in Fig. 1 of the present application, the detent pin 16 is threadless and includes a detent surface 17 for facilitating the connection with the second detent element. The second detent element 20 is complementary to the detent pin 16 and is mounted on the underside of the gas bag module 13. As described beginning at page 3, line 4-8 of the subject application, the second detent element 20 enters into a detent connection with the surface 17 of the detent pin 16 when the gas bag module 13 is pushed into the cavity of the steering wheel. An unlocking mechanism allows for detaching the gas bag module from the steering wheel.

In Bohn, the connection between the gas bag module and the steering wheel skeleton is established via a mounting stud 10 and bolt 12. The mounting stud 10 is for movingly securing the gas bag module 5 to the steering wheel. (see column 2, lines 37-43). Thus, in Bohn, to connect the gas bag module to the steering wheel, the gas bag module must be positioned on the steering wheel and the bolt must be manually screwed onto the stud to form the connection. The connection in Bohn

thus differs from the detent connection of the present invention both in form (Bohn teaches a threaded connection; not a detent connection) and function (Bohn requires the manual installation of the bolt to the stud, whereas the present invention forms an automatic connection when the gas bag module is placed on the steering wheel).

Also, the fastening mechanism of Bohn includes a complex horn actuation device and additionally provides a centering function for the cover of the gas bag module. Elements 15 and 19, which the Examiner alleges to be the "second detent element", are, in fact, a helical spring that provides a return force for the horn actuation mechanism (15) and the dished recess of the mounting tab of the gas bag module (19). These elements are not in form or function comparable to the disclosed detent connection. One of ordinary skilled in the art would not consider Bohn when looking for a simplified option to fix a detent element to a skeleton of a steering wheel.

Further, Bohn does not teach or suggest at least one separate support component for the detent pin that engages the skeleton and is directly connected to the skeleton. The Examiner admits as much in the Office Action.

Albayrak does not cure the deficiencies of Bohn. Albayrak is directed to mounting an emblem on a steering wheel. Albayrak does not teach or suggest any means suitable for mounting a gas bag module to a steering wheel. In fact, Albayrak does not even show or describe a gas bag module. In Albayrak, the connectors are made of the same injection molded plastic used to form the emblem. Such connectors clearly would not be suitable for connecting a gas bag module to a steering wheel because they possess nowhere near the strength required to

withstand the forces involved in mounting a gas bag module and those involved in gas bag deployment.

Accordingly, the rejection of claims 3 and 5 under 35 U.S.C. 103(a) as being unpatentable over Bohn and over Bohn in view of Albayrak is improper and should be withdrawn because Bohn and Albayrak, alone or in combination, do not teach or suggest all of the elements recited in claims 3 and 5.

Further, regarding claim 5, Bohn and Albayrak, alone or in combination, do not teach or suggest a support component being embedded into said skeleton. The Office Action admits that Bohn does not teach a support element embedded in the skeleton. The support component is placed in the mold during casting of the steering wheel skeleton and the skeleton is molded around the support component. The fastening element of Albayrak is not embedded into the skeleton. In Albayrak, the fastening element 26 is fastened to the skeleton by a snap connection after the steering wheel skeleton has been fabricated and partially surrounded with the sheathing.

2. There is no motivation in Bohn, Albayrak, or Drefahl to combine their respective teachings.

There is no suggestion or motivation in Bohn to rearrange the alleged support component of Bohn such that it is directly connected to the skeleton. The Office Action merely states that it would be obvious to do so "in order to provide a secure fastening between the support and the skeleton as taught or suggested by common knowledge in the art". There is, however, no teaching or suggestion in Bohn to support this position. In fact, Bohn specifically teaches that a foamed sheathing 4, which supporting portions 8, 8' abut, defines the positioning of the mounting studs

10. This foam also coats the through holes 9 in the spokes 2 for the studs 10 (see column 2, lines 42-49). Portions of the foam would have to be removed in order to directly connect the supporting portions 8, 8' to the spokes 2. This would lead one of ordinary skill in the art away from directly connect the supporting portions 8, 8' to the spokes 2.

Also, there is nothing to suggest that the threaded connection taught by Bohn would not provide a secure fastening between the gas bag module and the steering wheel. Therefore, because one skilled in the art would view the threaded connection as sufficient, there is no teaching or suggestion by common knowledge to change or modify this structure.

Also, the Examiner alleges that a direct connection between the support component and the steering wheel is evidenced by U.S. Patent No. 6,561,059 issued to Drefahl or U.S. Patent No. 6,644,145 issued to Albayrak. However, contrary to the Examiner's opinion, Drefahl does not show a support component 32 and a skeleton 30. Rather, Drefahl shows a steering wheel without a conventional skeleton. According to the objective of Drefahl at column 1, lines 49-51, "a steering wheel is made available which fully or almost completely does away with the steering wheel skeleton." The fastening element 32, which is alleged to be the support component, therefore, cannot be a separate support component engaging the skeleton, as no conventional skeleton is present.

Drefahl does not disclose a cast metal skeleton – it is molded plastic. Drefahl also does not disclose a support component 32 for a detent pin, but rather "a mounting structure 30 which at its outer ends comprises in the region of the shoulder 16 fastening elements 32 such as nuts." Fastening elements 32 cannot be

compared to the support component according to the invention, as the support component is used to carry a detent pin, whereas the fastening element 32 already is formed as part of a fastening connection. Further, fastening element 32 is not even a separate part from the mounting structure 30, let alone from a skeleton.

Albayrak is not related to mounting gas bag modules to steering wheels, as fastening element 26 is part of a detent connection that fixes a decorative element 18 to a steering wheel rim skeleton 20. No person skilled in the art would look to Albayrak to fasten a gas bag module to a steering wheel, as the forces introduced by the deploying gas bag into the steering wheel are far greater than the forces in which a decorative element has to withstand. Also, the support component carries the detent pin, whereas component 26 of Albayrak would be the detent pin itself.

Therefore, for the reasons set forth above, there is no motivation in the references themselves or in the level of ordinary skill in the art to combine the teachings of Bohn, Albayrak, and Drefahl. The combinations set forth in the Office Action only seem plausible using hindsight after having the benefit of the Applicants' disclosure. The use of the teachings of the present invention to find obviousness is impermissible.

The court must be ever alert not to read obviousness into an invention on the basis of applicant's own statements; that is, we must view the prior art without reading into that art applicant's teachings. The issue, then, is whether the teachings of the prior art would, in and of themselves and without the benefits of appellant's disclosure, make the invention as a whole obvious.

In Re Spunoble, 160 USPQ 237 at 243 (CCPA 1969) (emphasis in original).

As set forth above, there is nothing in the cited references that would lead on having ordinary skill in the art to replace the threaded connection between the gas

bag module and the steering wheel taught by Bohn. Because, the threaded connection in Bohn would be sufficient to connect the gas bag module to the steering wheel, absent the teachings of the present invention, one of ordinary skill in the art would not even consider modifying Bohn to attempt to arrive at the presently claimed invention.

Also, Applicant respectfully disagrees that it is common knowledge in the art to rearrange parts of Bohn to meet claim 3. In Ex parte Chicago Rawhide Mfg. Co., 223 USPQ 351, 353 (Bd. Pat. App. & Inter. 1984), the Board of Patent Appeals and Interferences held that "The mere fact that a worker in the art could rearrange the parts of the reference device to meet the terms of the claims on appeal is not by itself sufficient to support a finding of obviousness. The prior art must provide a motivation or reason for the worker in the art, without the benefit of appellant's specification, to make the necessary changes in the reference device."

Accordingly, the rejection of claim 3 under 35 U.S.C. 103(a) as being unpatentable over Bohn and over Bohn in view of Albayrak and Drefahl is improper and should be withdrawn because there is no motivation or suggestion in the references themselves or in the level of ordinary skill in the art to combine their respective teachings..

3. There is no reasonable expectation of success in modifying Bohn.

Further, there is not a reasonable expectation of success of modifying Bohn as proposed because the proposed rearrangement of Bohn would adversely affect the intended operation of Bohn's steering wheel. The gas bag module, the cover cap, and the mounting studs of Bohn form a preassembled unit (see column 3, lines 25-28). However, if supporting portion 8 were to be directly connected with the

steering wheel skeleton, as suggested in the Office Action, the gas bag module and the steering wheel would not be capable of being separated once connected, nor would the gas bag module be able to be prefabricated and then mounted to the steering wheel by connecting the screw 12 and the pin 10.

Accordingly, the rejection of claim 3 under 35 U.S.C. 103(a) as being unpatentable over Bohn and over Bohn in view of Albayrak is improper and should be withdrawn because there is no reasonable expectation of success in making the modifications to Bohn proposed by the Office Action.

For the reasons set forth above, the rejections of claims 3 and 5 under 35 U.S.C. 103(a) are improper and should be withdrawn. Claims 10, 12, and 15-17 depend from claim 3 and are therefore allowable as depending from an allowable claim and for the specific features recited therein. Claims 6, 7, 9, 11, 13, and 14 depend from claim 5 and are therefore allowable as depending from an allowable claim and for the specific features recited therein.

Regarding new claim 15, the references cited in the Office Action do not teach or suggest a detent pin and a support component for the detent pin that are separate pieces. Therefore, claim 15 is allowable for this further reason.

Regarding new claim 16, the references cited in the Office Action do not teach or suggest the support component and the detent pin forming a prefabricated assembly. None of the cited references disclose or suggest this feature. Therefore, claim 16 is allowable for this further reason.

Regarding claim 6, the references cited in the Office Action do not teach or suggest a skeleton having a recess around said detent pin. Therefore, claim 6 is allowable for this further reason.

Regarding claim 7, the references cited in the Office Action do not teach or suggest a detent pin having no threads. Therefore, claim 7 is allowable for this further reason.

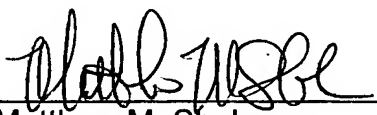
Regarding claim 13, the references cited in the Office Action do not teach or suggest a skeleton of the steering wheel comprising a hub cup on which the support component is arranged. Therefore, claim 13 is allowable for this further reason.

Regarding claim 14, the references cited in the Office Action do not teach or suggest a support component and detent pin that form a prefabricated assembly. Therefore, claim 14 is allowable for this further reason.

In view of the foregoing, it is respectfully requested that the amendment be entered and the application allowed.

Please charge any deficiency or credit any overpayment in the fees for this amendment to our Deposit Account No. 20-0090.

Respectfully submitted,



Matthew M. Shaheen
Reg. No. 45,367

TAROLLI, SUNDHEIM, COVELL,
& TUMMINO L.L.P.
1300 East Ninth Street, Suite 1700
Cleveland, Ohio 44114
Phone: (216) 621-2234
Fax: (216) 621-4072
Customer No. 26, 294